New Biology Science Standards: Revision of the Rearticulation Terry L Hufford

Perusal of the submitted revision will indicate that the basic strands and standards have not changed significantly. Some have been rewritten or reorganized for added clarity, elimination of a specific or implied misconception, or correction of an error. In addition examples are given in some instances as an aid to the teacher. (Please note the condition provided in the Preamble).

The principal foci in teaching biology are understanding the:

- i) language of biology,
- ii) process of biology.
- iii) integration of biology with other disciplines (biology cannot be taught in a silo),
- iv) understanding the implications rather than simply the memorization of biological terms, structures and processes, and the
- v) application of this knowledge in technological, societal, economic and other ways.

With these in mind a method for consideration of the New Biology Science Standards is provided. In all instances teleological statements are eliminated. It is important for the student to understand that biological phenomena are the consequence of specific sequences of biological or biochemical activities, not the reason for such activities. We have also attempted to include current biological knowledge and understanding in the construction of Standards and Subsections of Standards (see, for example *B.2.2*). We have also attempted to eliminate possible misunderstanding by using more specific statements (see, for example *B.2.4*). In addition we have altered incorrect or inappropriate materials by providing current information and interpretation (see, for example *Standard 7: Genetics*). *Standard 10: Evolution* has been strengthening in keeping with its importance as the keystone to all biological events and processes.